ABSTRACT OF THE DISCLOSURE

A vertically mountable semiconductor device assembly including a semiconductor device and a mechanism for attaching the semiconductor device to a carrier substrate. The semiconductor device has each of its bond pads disposed proximate a single edge thereof. Preferably, at least a portion of the semiconductor device is exposed. An alignment device is attached to a carrier substrate. A mounting element on the vertically mountable semiconductor device package engages the alignment device to interconnect the semiconductor device and the alignment device. Preferably, the alignment device secures the vertically mountable semiconductor device package perpendicular relative to the carrier substrate. The distance between the bond pads and corresponding terminals on the carrier substrate is very small in order to reduce impedance. The vertically mountable semiconductor device package may also be readily user-upgradable.